

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR MANAGEMENT**

**Sellersburg Stone Company, Inc.  
1019 East Utica Street  
Sellersburg, Indiana 47172**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F019-11033-00011	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary crushed stone processing plant, with one (1) portable facility.

Authorized individual: Kenneth Rush  
Source Address: 1019 East Utica Street, Sellersburg, Indiana 47172  
Mailing Address: P.O. Box D, Sellersburg, Indiana 47172  
Phone Number: (812) 246-3383  
SIC Code: 3281  
County Location: Clark  
County Status: Nonattainment for ozone  
Attainment for all other criteria pollutants  
Source Status: Federally Enforceable State Operating Permit (FESOP)  
Minor Source, under PSD and Emission Offset Rules;  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of 1,936 tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #1, with a maximum capacity of 1,600 tons per hour, exhausting fugitively;
  - (2) secondary crushers, identified as Unit #2, with a maximum capacity of 1,400 tons per hour, exhausting fugitively;
  - (3) tertiary crushers, identified as Unit #3, with a maximum capacity of 1,400 tons per hour, exhausting back into the building;
  - (4) triple finish screens and scalper screens, identified as Unit #4, each with a maximum capacity of 5,580 and 1,400 tons per hour, respectively, each exhausting back into the building;
  - (5) conveyors, identified as Unit #5, with a maximum capacity of 1,936 tons per hour, exhausting fugitively;
- (b) One (1) aggregate wash plant, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with the following:
  - (1) screens, identified as Unit #11, with a maximum capacity of 800 tons per hour, exhausting fugitively;
  - (2) conveyors, identified as Unit #12, with a maximum capacity of 800 tons per hour, exhausting fugitively;
- (c) One (1) pug mill, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with conveyors, identified as Unit #13, exhausting fugitively;

- (d) One (1) phoenix turn key dewatering system, constructed in 1998, with a maximum capacity of 70 tons per hour, equipped with conveyors, identified as Unit #14, exhausting fugitively; and
- (e) One (1) portable crushing operation, with a maximum capacity of 600 tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #6, with a maximum capacity of 400 tons per hour, exhausting fugitively;
  - (2) secondary crushers, identified as Unit #7, with a maximum capacity of 400 tons per hour, exhausting fugitively;
  - (3) tertiary crushers, identified as Unit #8, with a maximum capacity of 400 tons per hour, exhausting fugitively;
  - (4) screens, identified as Unit #9, with a maximum capacity of 600 tons per hour, exhausting fugitively; and
  - (5) conveyors, identified as Unit #10, with a maximum capacity of 600 tons per hour, exhausting fugitively.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source, with a portable operation, does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21).

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary and portable source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

## **SECTION B                    GENERAL CONDITIONS**

### **B.1        Permit No Defense [IC 13]**

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

### **B.2        Definitions [326 IAC 2-8-1]**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

### **B.3        Permit Term [326 IAC 2-8-4(2)]**

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### **B.4        Enforceability [326 IAC 2-8-6]**

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

### **B.5        Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]**

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

### **B.6        Severability [326 IAC 2-8-4(4)]**

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.7        Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

This permit does not convey any property rights of any sort, or any exclusive privilege.

### **B.8        Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]**

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

- (c) Upon request, the Permittee shall also furnish to IDEM, OAM copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

**B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]**

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IDEM, OAM may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

**B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]**

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- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
- (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]**

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted under this permit shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

**B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015



- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAM may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]**

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

**B.14 Emergency Provisions [326 IAC 2-8-12]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the

certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]**

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D

of this permit unless tied to an applicable rule or limit; or

- (2) An emergency as defined in 326 IAC 2-7-1(12); or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.17 Permit Renewal** [326 IAC 2-8-3(h)]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
  - (2) If IDEM, OAM upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as needed to process the application.

**B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11.1]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1) only if a certification is required by the terms of the applicable rule.
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

**B.19 Operational Flexibility [326 IAC 2-8-15]**

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- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air

Act;

- (2) Any approval required by 326 IAC 2-1.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAM or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.20 Construction Permit Requirement [326 IAC 2]**

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A modification, construction, or reconstruction shall be approved if required by and in accordance with the applicable provisions of 326 IAC 2.

**B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-8-5(a)(4)]

**B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.24 Advanced Source Modification Approval [326 IAC 2-8-4(11)]

The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3 if such modifications occur during the term of this permit.



## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), emissions of particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) The stationary source opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) The portable source opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (c) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]**

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

**C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]**

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. The provisions of 326 IAC 9-1-2 are not federally enforceable.

**C.5 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]**

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on June 1, 1999. The plan consists of:

- (a) Fugitive particulate matter emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following methods:

Paved roads and parking lots:

- (1) cleaning by vacuum sweeping on an as needed basis (monthly at a minimum);
- (2) power brooming while wet either from rain or application of water;
- (3) power wash with water.

Unpaved roads and parking lots:

- (1) paving with asphalt;
- (2) treating with water on an as needed basis.

- (b) Fugitive particulate matter emissions from aggregate stockpiles shall be controlled by one or more of the following methods on an as needed basis:

- (1) treating around the stockpile area with water;
- (2) treating the stockpiles with water.

- (c) Fugitive particulate matter emissions from outdoor conveying of aggregates shall be controlled by the following method on an as needed basis:

- (1) applying water at the feed and the intermediate points;
- (2) enclose the transfer points;
- (3) apply water on transfer points on an as needed basis.

- (d) Fugitive particulate matter emissions from the transfer of aggregates shall be controlled by one of the following methods:

- (1) enclose the transfer points;
- (2) apply water on transfer points on an as needed basis.

- (e) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by one of the following methods:

- (1) tarping the aggregate hauling vehicles;
  - (2) maintain vehicle bodies in a condition to prevent leakage;
  - (3) spray the aggregates with water;
  - (4) maintain a 20 MPH speed limit in the yard.
- (f) Fugitive particulate matter emissions from the loading and unloading of aggregate shall be controlled by one of the following methods:
  - (1) reduce free fall distance to a minimum;
  - (2) reduce the rate of discharge of the aggregate;
  - (3) spray the aggregate with water on an as needed basis.

**C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]**

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Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

**C.8 Stack Height [326 IAC 1-7]**

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The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

**C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]**

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Management

100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

#### **Testing Requirements [326 IAC 2-8-4(3)]**

##### **C.10 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

##### **C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

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Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**C.12 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

**C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]**

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If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5] [326 IAC 1-6]**

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;

- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
  - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]  
[326 IAC 2-8-5]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented.

IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

##### **C.16 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]**

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6. This annual statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year). The annual statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

##### **C.17 Monitoring Data Availability**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is

documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.



**C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)]**

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- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

**Stratospheric Ozone Protection**

**C.20 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of 1,936 tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #1, with a maximum capacity of 1,600 tons per hour, exhausting fugitively;
  - (2) secondary crushers, identified as Unit #2, with a maximum capacity of 1,400 tons per hour, exhausting fugitively;
  - (3) tertiary crushers, identified as Unit #3, with a maximum capacity of 1,400 tons per hour, exhausting back into the building;
  - (4) triple finish screens and scalper screens, identified as Unit #4, each with a maximum capacity of 5,580 and 1,400 tons per hour, respectively, each exhausting back into the building;
  - (5) conveyors, identified as Unit #5, with a maximum capacity of 1,936 tons per hour, exhausting fugitively;
- (b) One (1) aggregate wash plant, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with the following:
  - (1) screens, identified as Unit #11, with a maximum capacity of 800 tons per hour, exhausting fugitively;
  - (2) conveyors, identified as Unit #12, with a maximum capacity of 800 tons per hour, exhausting fugitively;
- (c) One (1) pug mill, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with conveyors, identified as Unit #13, exhausting fugitively; and
- (d) One (1) phoenix turn key dewatering system, constructed in 1998, with a maximum capacity of 70 tons per hour, equipped with conveyors, identified as Unit #14, exhausting fugitively.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the permanent crushing operation, aggregate wash plant, pug mill, and phoenix turn key dewatering system shall not exceed the following pounds per hour when operating at the following process weight rates in tons per hour:

Facility	Process Weight Rate (tons per hour)	Allowable PM emissions (pounds per hour)
Permanent Crushing Operation	1,936	86.45
Aggregate Wash Plant	800	74.74
Pug Mill	800	74.74
Phoenix Turn Key Dewatering System	70	47.77

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000

pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.2 Particulate Matter (PM) [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the fugitive and nonfugitive PM emissions from the permanent crushing operation, aggregate wash plant, pug mill, and the phoenix turn key dewatering system shall not exceed the following:

Facility	PM emissions (pounds per hour)	PM emissions (tons per year)
Permanent Crushing Operation	31.59	138.38
Aggregate Wash Plant	1.07	4.68
Pug Mill	1.03	4.53
Phoenix Turn Key Dewatering System	0.90	3.95

These PM limits will make 326 IAC 2-2 not applicable.

#### D.1.3 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the PM-10 emissions from the permanent crushing operation, aggregate wash plant, pug mill, and the phoenix turn key dewatering system shall not exceed the following:

Facility	PM-10 emissions (pounds per hour)	PM-10 emissions (tons per year)
Permanent Crushing Operation	11.37	49.82
Aggregate Wash Plant	0.38	1.68
Pug Mill	0.37	1.63
Phoenix Turn Key Dewatering System	0.32	1.42

#### D.1.4 Opacity [326 IAC 12] [40 CFR Part 60.670-676]

Pursuant to 326 IAC 12, (40 CFR Part 60.670-676, Subpart OOO) "Standard of Performance for Nonmetallic Mineral Processing Plant", the permanent crushing operation, aggregate wash plant, pug mill, and the phoenix turn key dewatering system shall not discharge or cause the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 % opacity, and any crusher at which a capture system is not used, fugitive emissions which exhibit greater than 15 % opacity.

#### D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

## **Compliance Determination Requirements**

### **D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.1.2 or the PM-10 limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.1.7 Visible Emissions Notations**

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- (a) Daily visible emission notations of the permanent crushing operation, aggregate wash plant, pug mill, and phoenix turn key dewatering system ductworks and associated components exhaust for evidence of holes or erosions shall be performed during normal daylight operations when facilities are in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

## **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.8 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the permanent crushing operation, aggregate wash plant, pug mill, and phoenix turn key dewatering system ductworks and associated components exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## FACILITY CONDITIONS

### **Facility Description [326 IAC 2-8-4(10)]:**

One (1) portable crushing operation, with a maximum capacity of 600 tons per hour, equipped with the following:

- (1) primary crushers, identified as Unit #6, with a maximum capacity of 400 tons per hour, exhausting fugitively;
- (2) secondary crushers, identified as Unit #7, with a maximum capacity of 400 tons per hour, exhausting fugitively;
- (3) tertiary crushers, identified as Unit #8, with a maximum capacity of 400 tons per hour, exhausting fugitively;
- (4) screens, identified as Unit #9, with a maximum capacity of 600 tons per hour, exhausting fugitively; and
- (5) conveyors, identified as Unit #10, with a maximum capacity of 600 tons per hour, exhausting fugitively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-8-11.1, WITH CONDITIONS LISTED BELOW.

### **Construction Conditions**

#### **General Construction Conditions**

D.2.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### **Effective Date of the Permit**

D.2.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.2.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

D.2.4 Pursuant to the New Source Performance Standards (NSPS), Part 60.670 through 60.676, Subpart OOO, the source is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- (c) Actual start-up date (within 15 days after such date); and
- (d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM-OAM.  
The requirements of 40 CFR Part 60 are also federally enforceable.

### **Operation Conditions**

#### **Emission Limitations and Standards [326 IAC 2-8-4(1)]**

##### D.2.5 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the portable crushing operation shall not exceed 71.16 pounds per hour when operating at a process weight rate of 600 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

##### D.2.6 Particulate Matter (PM) [326 IAC 2-2]

The PM emission from the portable crushing operation shall not exceed 13.46 pounds per hour, which is equivalent to 58.95 tons per year. This PM limit will make 326 IAC 2-2 not applicable.

##### D.2.7 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the PM-10 emissions from the portable crushing operation, shall not exceed 4.84 pounds per hour, which is equivalent to 21.22 tons per year.

##### D.2.8 Opacity [326 IAC 12] [40 CFR Part 60.670-676]

Pursuant to 326 IAC 12, (40 CFR Part 60.670-676, Subpart OOO) "Standard of Performance for Nonmetallic Mineral Processing Plant", the portable crushing operation shall not discharge or cause the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 % opacity, and any crusher at which a capture system is not used, fugitive emissions which exhibit greater than 15 % opacity.

##### D.2.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

### **Portable Facility Requirement**

#### **D.2.10 Relocation of Portable Facility [326 IAC 2-14-4]**

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- (a) The portable crushing operation is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone. This determination is based on the requirements Prevention of Significant Deterioration in 326 IAC 2-2 and 40 CFR 52.21, and Emission Offset requirements in 326 IAC 2-3. A thirty (30) day advance notice of relocation must be given to IDEM, OAM and a "Relocation Site Approval" letter must be obtained before relocating.
- (b) The Permittee shall also notify the applicable local air pollution control agency when relocating to or from one of the following:
  - (1) Madison County - (Anderson Office of Air Management)
  - (2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)
  - (3) City of Gary - (Gary Division of Air Pollution)
  - (4) City of Hammond - (Hammond Department of Environmental Management)
  - (5) Marion County - (Indianapolis Air Pollution Control Agency)
  - (6) St. Joseph County - (St. Joseph County Health Department)
  - (7) Vigo County - (Vigo County Air Pollution Department)
- (c) That a valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable crushing operation.

#### **Compliance Determination Requirements**

#### **D.2.11 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform opacity testing utilizing Method 9, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

#### **D.2.12 Visible Emissions Notations**

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- (a) Daily visible emission notations of the portable crushing operation ductworks and associated components exhaust for evidence of holes or erosions shall be performed during normal daylight operations when facilities are in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

**Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.2.13 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.11, the Permittee shall maintain records of daily visible emission notations of the portable crushing operation ductworks and associated components exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Sellersburg Stone Company, Inc.  
Source Address: 1019 East Utica Street, Sellersburg, Indiana 47172  
Mailing Address: P.O. Box D, Sellersburg, Indiana 47172  
FESOP No.: F019-11033-00011

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Sellersburg Stone Company, Inc.  
Source Address: 1019 East Utica Street, Sellersburg, Indiana 47172  
Mailing Address: P.O. Box D, Sellersburg, Indiana 47172  
FESOP No.: F019-11033-00011

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)  
CThe Permittee must notify the Office of Air Management (OAM), within four **(4)** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
CThe Permittee must submit notice in writing or by facsimile within two **(2)** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9** 2. This is a deviation, reportable per 326 IAC 2-8-4(3)(C)  
CThe Permittee must submit notice in writing within ten **(10)** calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

**Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: Sellersburg Stone Company, Inc.  
Source Address: 1019 East Utica Street, Sellersburg, Indiana 47172  
Mailing Address: P.O. Box D, Sellersburg, Indiana 47172  
FESOP No.: F019-11033-00011

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

<b>Compliance Monitoring Requirement</b> (eg. Permit Condition D.1.3)	<b>Number of Deviations</b>	<b>Date of each Deviation</b>

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## **Indiana Department of Environmental Management Office of Air Management**

### **Addendum to the Technical Support Document for a Federally Enforceable Operating Permit (FESOP)**

Source Name: Sellersburg Stone Company, Inc.  
Source Location: 1019 East Utica Street, Sellersburg, IN 47172  
County: Clark  
SIC Code: 3281  
Operation Permit No.: F019-11033-00011  
Permit Reviewer: Yvette de los Angeles/EVP

On September 1, 1999, the Office of Air Management (OAM) had a notice published in the Evening News, Jeffersonville, Indiana, stating that Sellersburg Stone Company, Inc. had applied for a Federally Enforceable Operating Permit (FESOP) to operate a crushed stone processing plant. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 13, 1999, Diane Green of Sellersburg Stone Company, Inc. submitted comments on the proposed Federally Enforceable Operating Permit (FESOP). The summary of the comments and corresponding responses is as follows:

#### **Comment 1**

In Section A.2(a) of the permit, the correct maximum capacity for the permanent crushing operation is 1,936 tons per hour. It is incorrectly stated as 1,100 tons per hour in this section. See the correct wording in the Permitted Emission Units and Pollution Control Equipment section of the Technical Support Document (TSD).

#### **Response 1**

The TSD lists the correct maximum capacity for the crushing operation, and the permit should list a maximum capacity for the permanent crushing operation of 1,936 tons per hour. There will be no increase in potential emissions as a result of this correction, and the changes to Section A.2 of the permit are as follows:

- (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of ~~1,100~~ **1,936** tons per hour, equipped with the following:

#### **Comment 2**

In Condition C.2(a), the average opacity is stated as "thirty percent (40%)." These numbers should match.

#### **Response 2**

The portable facility located at the source is subject to an opacity limitation of thirty percent (30%), whereas the stationary facilities located at the source are subject to a forty percent (40%) opacity limitation. Condition C.2(a), the stationary source opacity limit, has been corrected to read as follows:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3

(Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) The stationary source opacity shall not exceed an average of ~~thirty~~ **forty** percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

### Comment 3

In Condition D.1(a) of the permit, the correct maximum capacity for the permanent crushing operation is 1,936 tons per hour. It is incorrectly stated as 1,100 tons per hour in this section. See the correct wording in the Permitted Emission Units and Pollution Control Equipment section of the Technical Support Document.

### Response 3

The TSD lists the correct maximum capacity for the crushing operation. There will be no increase in potential emissions as a result of this correction, and the changes to Condition D.1(a) of the permit are as follows:

- (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of ~~1,100~~ **1,936** tons per hour, equipped with the following:

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

- (a) To clarify that the emission points of crushers, screens, and conveyors vent fugitively to the atmosphere without the use of stacks, the following changes have been made to Section A.2 of the permit:
  - (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of ~~1,100~~ **1,936** tons per hour, equipped with the following:
    - (1) primary crushers, identified as Unit #1, with a maximum capacity of 1,600 tons per hour, exhausting ~~through one (1) stack ID #1~~ **fugitively**;
    - (2) secondary crushers, identified as Unit #2, with a maximum capacity of 1,400 tons per hour, exhausting ~~through one (1) stack ID #2~~ **fugitively**;
    - (3) tertiary crushers, identified as Unit #3, with a maximum capacity of 1,400 tons per hour, exhausting back into the building;
    - (4) triple finish screens and scalper screens, identified as Unit #4, each with a maximum capacity of 5,580 and 1,400 tons per hour, respectively, each exhausting back into the building;
    - (5) conveyors, identified as Unit #5, with a maximum capacity of 1,936 tons per hour, exhausting ~~through one (1) stack ID #5~~ **fugitively**;
  - (b) One (1) aggregate wash plant, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with the following:
    - (1) screens, identified as Unit #11, with a maximum capacity of 800 tons per hour, exhausting ~~through one (1) stack ID #11~~ **fugitively**;
    - (2) conveyors, identified as Unit #12, with a maximum capacity of 800 tons per hour, exhausting ~~through one (1) stack ID #12~~ **fugitively**;
  - (c) One (1) pug mill, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with conveyors, identified as Unit #13, exhausting ~~through one (1) stack ID #13~~ **fugitively**;

- (d) One (1) phoenix turn key dewatering system, constructed in 1998, with a maximum capacity of 70 tons per hour, equipped with conveyors, identified as Unit #14, exhausting ~~through one (1) stack ID #14~~ **fugitively**; and
- (e) One (1) portable crushing operation, with a maximum capacity of 600 tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #6, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #6~~ **fugitively**;
  - (2) secondary crushers, identified as Unit #7, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #7~~ **fugitively**;
  - (3) tertiary crushers, identified as Unit #8, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #8~~ **fugitively**;
  - (4) screens, identified as Unit #9, with a maximum capacity of 600 tons per hour, exhausting ~~through one (1) stack ID #9~~ **fugitively**; and
  - (5) conveyors, identified as Unit #10, with a maximum capacity of 600 tons per hour, exhausting ~~through one (1) stack ID #10~~ **fugitively**.
- (b) To clarify that the emission points of crushers, screens, and conveyors vent fugitively to the atmosphere without the use of stacks, the following changes have been made to the Facility Description in Section D.1 of the permit:
  - (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of 1,100 tons per hour, equipped with the following:
    - (1) primary crushers, identified as Unit #1, with a maximum capacity of 1,600 tons per hour, exhausting ~~through one (1) stack ID #1~~ **fugitively**;
    - (2) secondary crushers, identified as Unit #2, with a maximum capacity of 1,400 tons per hour, exhausting ~~through one (1) stack ID #2~~ **fugitively**;
    - (3) tertiary crushers, identified as Unit #3, with a maximum capacity of 1,400 tons per hour, exhausting back into the building;
    - (4) triple finish screens and scalper screens, identified as Unit #4, each with a maximum capacity of 5,580 and 1,400 tons per hour, respectively, each exhausting back into the building;
    - (5) conveyors, identified as Unit #5, with a maximum capacity of 1,936 tons per hour, exhausting ~~through one (1) stack ID #5~~ **fugitively**;
  - (b) One (1) aggregate wash plant, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with the following:
    - (1) screens, identified as Unit #11, with a maximum capacity of 800 tons per hour, exhausting ~~through one (1) stack ID #11~~ **fugitively**;
    - (2) conveyors, identified as Unit #12, with a maximum capacity of 800 tons per hour, exhausting ~~through one (1) stack ID #12~~ **fugitively**;
  - (c) One (1) pug mill, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with conveyors, identified as Unit #13, exhausting ~~through one (1) stack ID #13~~ **fugitively**; and
  - (d) One (1) phoenix turn key dewatering system, constructed in 1998, with a maximum capacity of 70 tons per hour, equipped with conveyors, identified as Unit #14, exhausting ~~through one (1) stack ID #14~~ **fugitively**.
- (c) To clarify that the emission points of crushers, screens, and conveyors vent fugitively to the atmosphere without the use of stacks, the following changes have been made to the Facility Description in Section D.2 of the permit:.

- (a) One (1) portable crushing operation, with a maximum capacity of 600 tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #6, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #6~~ **fugitively**;
  - (2) secondary crushers, identified as Unit #7, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #7~~ **fugitively**;
  - (3) tertiary crushers, identified as Unit #8, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #8~~ **fugitively**;
  - (4) screens, identified as Unit #9, with a maximum capacity of 600 tons per hour, exhausting ~~through one (1) stack ID #9~~ **fugitively**; and
  - (5) conveyors, identified as Unit #10, with a maximum capacity of 600 tons per hour, exhausting ~~through one (1) stack ID #10~~ **fugitively**.

The following revisions have been made to the TSD (**bolded** language has been added, the language with a ~~line~~ through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

- (a) To clarify that the emission points of crushers, screens, and conveyors vent fugitively to the atmosphere without the use of stacks, the following changes have been made to page 1 of 11 of the TSD:

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of ~~1,400~~ **1,936** tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #1, with a maximum capacity of 1,600 tons per hour, exhausting ~~through one (1) stack ID #1~~ **fugitively**;
  - (2) secondary crushers, identified as Unit #2, with a maximum capacity of 1,400 tons per hour, exhausting ~~through one (1) stack ID #2~~ **fugitively**;
  - (3) tertiary crushers, identified as Unit #3, with a maximum capacity of 1,400 tons per hour, exhausting back into the building;
  - (4) triple finish screens and scalper screens, identified as Unit #4, each with a maximum capacity of 5,580 and 1,400 tons per hour, respectively, each exhausting back into the building;
  - (5) conveyors, identified as Unit #5, with a maximum capacity of 1,936 tons per hour, exhausting ~~through one (1) stack ID #5~~ **fugitively**;
- (b) One (1) aggregate wash plant, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with the following:
  - (1) screens, identified as Unit #11, with a maximum capacity of 800 tons per hour, exhausting ~~through one (1) stack ID #11~~ **fugitively**;
  - (2) conveyors, identified as Unit #12, with a maximum capacity of 800 tons per hour, exhausting ~~through one (1) stack ID #12~~ **fugitively**;
- (c) One (1) pug mill, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with conveyors, identified as Unit #13, exhausting ~~through one (1) stack ID #13~~ **fugitively**;
- (d) One (1) phoenix turn key dewatering system, constructed in 1998, with a maximum capacity of 70 tons per hour, equipped with conveyors, identified as



Unit #14, exhausting ~~through one (1) stack ID #14~~ **fugitively**; and

- (b) To clarify that the emission points of crushers, screens, and conveyors vent fugitively to the atmosphere without the use of stacks, the following changes have been made to page 2 of 11:
- (a) One (1) portable crushing operation, with a maximum capacity of 600 tons per hour, equipped with the following:
- (1) primary crushers, identified as Unit #6, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #6~~ **fugitively**;
  - (2) secondary crushers, identified as Unit #7, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #7~~ **fugitively**;
  - (3) tertiary crushers, identified as Unit #8, with a maximum capacity of 400 tons per hour, exhausting ~~through one (1) stack ID #8~~ **fugitively**;
  - (4) screens, identified as Unit #9, with a maximum capacity of 600 tons per hour, exhausting ~~through one (1) stack ID #9~~ **fugitively**; and
  - (5) conveyors, identified as Unit #10, with a maximum capacity of 600 tons per hour, exhausting ~~through one (1) stack ID #10~~ **fugitively**.
- (c) The portable facility is subject to an opacity limitation of thirty percent (30%), whereas the stationary facilities making up the remainder of the source are subject to a forty percent (40%) opacity limitation. On page 7 of 11, the stationary source opacity limit has been corrected to read as follows:
- Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
- (a) The stationary source opacity shall not exceed an average of ~~thirty~~ **forty** percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Federally Enforceable Operating Permit (FESOP)**

#### **Source Background and Description**

**Source Name:** Sellersburg Stone Company, Inc.  
**Source Location:** 1019 East Utica Street, Sellersburg, IN 47172  
**County:** Clark  
**SIC Code:** 3281  
**Operation Permit No.:** F019-11033-00011  
**Permit Reviewer:** Yvette de los Angeles/EVP

The Office of Air Management (OAM) has reviewed a FESOP application from Sellersburg Stone Company, Inc. relating to the operation of a crushed stone processing plant.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) permanent crushing operation, constructed in 1985, with a maximum capacity of 1,936 tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #1, with a maximum capacity of 1,600 tons per hour, exhausting through one (1) stack ID #1;
  - (2) secondary crushers, identified as Unit #2, with a maximum capacity of 1,400 tons per hour, exhausting through one (1) stack ID #2;
  - (3) tertiary crushers, identified as Unit #3, with a maximum capacity of 1,400 tons per hour, exhausting back into the building;
  - (4) triple finish screens and scalper screens, identified as Unit #4, each with a maximum capacity of 5,580 and 1,400 tons per hour, respectively, each exhausting back into the building;
  - (5) conveyors, identified as Unit #5, with a maximum capacity of 1,936 tons per hour, exhausting through one (1) stack ID #5;
- (b) One (1) aggregate wash plant, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with the following:
  - (1) screens, identified as Unit #11, with a maximum capacity of 800 tons per hour, exhausting through one (1) stack ID #11;
  - (2) conveyors, identified as Unit #12, with a maximum capacity of 800 tons per hour, exhausting through one (1) stack ID #12;
- (c) One (1) pug mill, constructed in 1986, with a maximum capacity of 800 tons per hour, equipped with conveyors, identified as Unit #13, exhausting through one (1) stack ID #13; and
- (d) One (1) phoenix turn key dewatering system, constructed in 1998, with a maximum capacity of 70 tons per hour, equipped with conveyors, identified as Unit #14, exhausting through one (1) stack ID #14.

### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

### **New Emission Units and Pollution Control Equipment Receiving Prior Approval**

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

- (a) One (1) portable crushing operation, with a maximum capacity of 600 tons per hour, equipped with the following:
  - (1) primary crushers, identified as Unit #6, with a maximum capacity of 400 tons per hour, exhausting through one (1) stack ID #6;
  - (2) secondary crushers, identified as Unit #7, with a maximum capacity of 400 tons per hour, exhausting through one (1) stack ID #7;
  - (3) tertiary crushers, identified as Unit #8, with a maximum capacity of 400 tons per hour, exhausting through one (1) stack ID #8;
  - (4) screens, identified as Unit #9, with a maximum capacity of 600 tons per hour, exhausting through one (1) stack ID #9; and
  - (5) conveyors, identified as Unit #10, with a maximum capacity of 600 tons per hour, exhausting through one (1) stack ID #10.

A thirty (30) day advance notice of relocation must be given to IDEM, OAM and a "Relocation Site Approval" letter must be obtained before relocating.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) The following VOC and HAP storage containers:
  - (1) Tank ID #1, constructed in 1985, with a maximum storage capacity of 10,000 gallons, storing gasoline;
  - (2) Tank ID #2, constructed in 1995, with a maximum storage capacity of 1,000 gallons, storing gasoline;
  - (3) Tank ID #3, constructed in 1985, with a maximum storage capacity of 10,000 gallons, storing diesel oil;
  - (4) Tank ID #4, constructed in 1985, with a maximum storage capacity of 10,000 gallons, storing diesel oil;
  - (5) Tank ID #5, constructed in 1985, with a maximum storage capacity of 275 gallons, storing kerosene;
  - (6) Tank ID #6, constructed in 1995, with a maximum storage capacity of 500 gallons, storing engine oil;
  - (7) Tank ID #7, constructed in 1995, with a maximum storage capacity of 500 gallons, storing hydraulic oil;
  - (8) Tank ID #8, constructed in 1996, with a maximum storage capacity of 300 gallons, storing waste antifreeze;
  - (9) Tank ID #9, constructed in 1995, with a maximum storage capacity of 1,000 gallons, storing waste oil;
  - (10) Tank ID #10, constructed in 1985, with a maximum storage capacity of 10,000 gallons, storing water;
  - (11) Tank ID #11, constructed in 1998, with a maximum storage capacity of 2,500 gallons, storing anionic compounds; and
  - (12) Tank ID #12, constructed in 1998, with a maximum storage capacity of 2,500 gallons, storing cationic compounds.

- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations;
- (c) Other categories with emissions below insignificant thresholds:
  - (1) Water pumps;
  - (2) Various storage facilities;
  - (3) Generators, with a maximum heat capacity of 2 MMBtu per hour;
  - (4) Cutting torches, soldering equipment, welding equipment;
  - (5) Solvent recycling system;
  - (6) Drilling; and
  - (7) Steam cleaning of equipment.

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 019-3071-00011, issued on November 29, 1993;
- (b) CP 019-3487-00011, issued on September 30, 1994;
- (c) CP 019-3677-00011, issued on November 21, 1994;
- (d) SSOA 019-5687-00011, issued on December 13, 1996;
- (e) Amendment 019-6950-00011, issued on November 4, 1996; and
- (f) SSOA 019-7595-00011, issued on February 20, 1997.

All conditions from previous approvals were incorporated into this FESOP except the following:

- (a) SSOA 019-7595-00011, issued on February 20, 1997.

Operation Condition 1: That the particulate matter (PM) emissions from this source does not exceed one hundred (100) tons per year, excluding fugitive emissions.

Reason not incorporated: The source is increasing PM emissions to less than 250 tons per year.

Operation Condition 2: That the source annual throughput shall not exceed one million (1,000,000) tons per year.

Reason not incorporated: The source is increasing annual throughput of the permanent crushing operation to less than thirteen million (13,000,000) tons per year.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on June 1, 1999. Additional information was received on July 26, 1999 and August 13, 1999.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (sixteen (16) pages).

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1,730.14
PM-10	622.85
SO <sub>2</sub>	0.00
VOC	0.00
CO	0.00
NO <sub>x</sub>	0.00

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.
- (c) Due to the increase in capacity, this stationary source (even without the portable source) has the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 are equal to or greater than 100 tons per year. Therefore, this stationary source (even without the portable source) is subject to the provisions of 326 IAC 2-7.

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1997 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	95.21
PM-10	38.78
SO <sub>2</sub>	0.00
VOC	0.00
CO	0.00
NO <sub>x</sub>	0.00
HAP (specify)	0.00

### Limited Potential to Emit

- (a) The source has accepted a federally enforceable limit on potential to emit PM-10 of less than 100 tons per year, consisting of:
- (i) 85.04 tons per year for the significant activities.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
<b>FUGITIVE EMISSIONS</b>							
Permanent Crushing Operation	152.47	54.88	0.00	0.00	0.00	0.00	0.00
Portable Crushing Operation	41.40	14.90	0.00	0.00	0.00	0.00	0.00
Wash Plant Operation	3.47	1.25	0.00	0.00	0.00	0.00	0.00
Pug Mill Operation	2.99	1.08	0.00	0.00	0.00	0.00	0.00
Phoenix Operations	3.55	1.28	0.00	0.00	0.00	0.00	0.00
Subtotal	203.88	73.39	0.00	0.00	0.00	0.00	0.00
<b>NONFUGITIVE EMISSIONS</b>							
Permanent Crushing Operation	23.61	8.50	0.00	0.00	0.00	0.00	0.00
Portable Crushing Operation	5.96	2.15	0.00	0.00	0.00	0.00	0.00
Wash Plant Operation	1.21	0.44	0.00	0.00	0.00	0.00	0.00
Pug Mill Operation	1.55	0.56	0.00	0.00	0.00	0.00	0.00
Phoenix Operations	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	32.34	11.65	0.00	0.00	0.00	0.00	0.00
<b>Total Emissions</b>	<b>236.21</b>	<b>85.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### County Attainment Status

The source is located in Clark County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	moderate nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for ozone.
- (b) Clark County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### Portable Facility

- (a) Initial Location  
This source contains one (1) portable facility, equipped with crushers, screens, and conveyors, and its initial location is 1019 East Utica Street, Sellersburg, Indiana 47172.
- (b) PSD and Emission Offset Requirements  
The emissions from this portable facility were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.
- (c) Fugitive Emissions  
This type of operation is not one of the 28 listed source categories under 326 IAC 2-2 but there is an applicable New Source Performance Standards that was in effect on August 7, 1980. Therefore, the fugitive PM emissions are counted toward determination of PSD and Emission Offset applicability.

#### Federal Rule Applicability

- (a) The permanent crushing operation, aggregate wash plant, pug mill, phoenix turn key dewatering system, and the portable crushing operation are subject to the New Source Performance Standard (326 IAC 12 and 40 CFR 60.670 through 60.676, Subpart OOO). The permanent crushing operation, aggregate wash plant, pug mill, phoenix turn key dewatering system, and the portable crushing operation shall not discharge or cause the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 % opacity, and any crusher at which a capture system is not used, fugitive emissions which exhibit greater than 15 % opacity.
- (b) The twelve (12) storage tanks are not subject to the New Source Performance Standard (326 IAC 12 and 40 CFR 60.110b, Subpart Kb). The storage capacities are less than 10,500 gallons.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source.

## **State Rule Applicability - Entire Source**

### **326 IAC 1-6-3 (Preventive Maintenance Plan)**

The source has submitted a Preventive Maintenance Plan (PMP) on June 1, 1999. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

### **326 IAC 2-2 (Prevention of Significant Deterioration)**

This source is not subject 326 IAC 2-2 (Prevention of Significant Deterioration). The limited potential to emit of PM is less than 250 tons per year. The fugitive PM emissions are counted toward determination of PSD applicability.

### **326 IAC 2-3 (Emission Offset)**

This source is not subject to the requirements of 326 IAC 2-3 (Emission Offset). The potential to emit of VOC or NOx emissions is less than 100 tons per year.

### **326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of PM-10 for Clark County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

### **326 IAC 2-8-4 (FESOP)**

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the total usage of PM-10 shall be limited to less than 100 tons per twelve (12) consecutive month period, rolled on a monthly basis, respectively. Therefore, the requirements of 326 IAC 2-7 do not apply.

### **326 IAC 5-1 (Visible Emissions Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) The stationary source opacity shall not exceed an average of thirty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) The portable source opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (c) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

### **326 IAC 6-4 (Fugitive Dust Emissions)**

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

### **326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)**

This source is subject to 326 IAC 6-5 for fugitive particulate matter emissions. Pursuant to 326 IAC 6-5, for any new source which has not received all the necessary preconstruction approvals before December 13, 1985, a fugitive dust control plan must be submitted, reviewed and approved. The fugitive dust control plan for this source includes the following:

- (a) Fugitive particulate matter emissions from paved roads, unpaved roads, and parking lots



shall be controlled by one or more of the following methods:

Paved roads and parking lots:

- (1) cleaning by vacuum sweeping on an as needed basis (monthly at a minimum);
- (2) power brooming while wet either from rain or application of water;
- (3) power wash with water.

Unpaved roads and parking lots:

- (1) paving with asphalt;
- (2) treating with water on an as needed basis.

- (b) Fugitive particulate matter emissions from aggregate stockpiles shall be controlled by one or more of the following methods on an as needed basis:
  - (1) treating around the stockpile area with water;
  - (2) treating the stockpiles with water.
- (c) Fugitive particulate matter emissions from outdoor conveying of aggregates shall be controlled by the following method on an as needed basis:
  - (1) applying water at the feed and the intermediate points;
  - (2) enclose the transfer points;
  - (3) apply water on transfer points on an as needed basis.
- (d) Fugitive particulate matter emissions from the transfer of aggregates shall be controlled by one of the following methods:
  - (1) enclose the transfer points;
  - (2) apply water on transfer points on an as needed basis.
- (e) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by one of the following methods:
  - (1) tarping the aggregate hauling vehicles;
  - (2) maintain vehicle bodies in a condition to prevent leakage;
  - (3) spray the aggregates with water;
  - (4) maintain a 20 MPH speed limit in the yard.
- (f) Fugitive particulate matter emissions from the loading and unloading of aggregate shall be controlled by one of the following methods:
  - (1) reduce free fall distance to a minimum;
  - (2) reduce the rate of discharge of the aggregate;
  - (3) spray the aggregate with water on an as needed basis.

#### **State Rule Applicability - Individual Facilities**

##### **326 IAC 6-1 (Nonattainment Area Limitations)**

This source is not subject to the requirements of this rule because, although it is a portable source which can be located in any of the counties listed in section 7 of the rule, and actual PM emissions are greater than 10 tons per year, none of the operations at this source are enclosed or vented through a stack, therefore, it would not be practical to measure emissions from these operations.

##### **326 IAC 6-3-2 (Process Operations)**

- (a) The particulate matter (PM) from the permanent crushing operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 55.0 (1,936^{0.11}) - 40 = 86.45 \text{ lbs/hr} = 378.66 \text{ tons/yr}$$

Based on this calculation, the controlled potential PM emissions of 176.08 tons/yr are less than the allowable emissions of 378.66 tons/yr. Therefore, permanent crushing operation complies with the rule.

- (b) The particulate matter (PM) from the aggregate wash plant shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 55.0 (800^{0.11}) - 40 = 74.74 \text{ lbs/hr} = 327.35 \text{ tons/yr}$$

Based on this calculation, the controlled potential PM emissions of 4.68 tons/yr are less than the allowable emissions of 327.35 tons/yr. Therefore, aggregate wash plant complies with the rule.

- (c) The particulate matter (PM) from the pug mill shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 55.0 (800^{0.11}) - 40 = 74.74 \text{ lbs/hr} = 327.35 \text{ tons/yr}$$

Based on this calculation, the controlled potential PM emissions of 4.53 tons/yr are less than the allowable emissions of 327.35 tons/yr. Therefore, the pug mill complies with the rule.

- (d) The particulate matter (PM) from the phoenix turn key dewatering system shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 55.0 (70^{0.11}) - 40 = 47.77 \text{ lbs/hr} = 209.21 \text{ tons/yr}$$

Based on this calculation, the controlled potential PM emissions of 3.56 tons/yr are less than the allowable emissions of 209.21 tons/yr. Therefore, the phoenix turn key dewatering system complies with the rule.

- (e) The particulate matter (PM) from the portable crushing operation shall be limited by the

following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 55.0 (600^{0.11}) - 40 = 71.16 \text{ lbs/hr} = 311.69 \text{ tons/yr}$$

Based on this calculation, the controlled potential PM emissions of 47.36 tons/yr are less than the allowable emissions of 311.69 tons/yr. Therefore, the portable crushing operation complies with the rule.

### Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The permanent crushing operation, aggregate wash plant, pug mill, phoenix turn key dewatering system, and the portable crushing operation have applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the permanent crushing operation, aggregate wash plant, pug mill, phoenix turn key dewatering system, and the portable crushing operation ductworks shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the permanent crushing operation,

aggregate wash plant, pug mill, phoenix turn key dewatering system, and the portable crushing operation must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 12 (40 CFR 60.670 through 60.676, Subpart OOO) and 326 IAC 2-8 (FESOP).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

None of the listed air toxics will be emitted from this source.

### **Conclusion**

The operation of this crushed stone processing plant shall be subject to the conditions of the attached proposed **FESOP No.: F019-11033-00011**.

## Appendix A: Emission Calculations

**Company Name:** Sellersburg Stone Company, Inc.  
**Address City IN Zip:** 1019 E. Utica St., Sellersburg, IN 47172  
**CP:** 019-11033  
**Plt ID:** 019-00011  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 10/13/99

### Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity						
Pollutant	Permanent Crushing Operations	Portable Crushing Operations	Wash Plant Operations	Pug Mill Operations	Phoenix Operations	TOTAL
PM	1,384.67	196.11	125.08	16.28	8.00	1,730.14
* PM10	498.48	70.60	45.03	5.86	2.88	622.85
SO2	0.00	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.00	0.00	0.00	0.00
VOC	0.00	0.00	0.00	0.00	0.00	0.00
CO	0.00	0.00	0.00	0.00	0.00	0.00
total HAPs	0.00	0.00	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00	0.00	0.00

Total emissions based on rated capacity at 8,760 hours/year.

\* PM-10 emissions are 36% of PM emissions.

### Controlled Potential Emissions (tons/year)

Emissions Generating Activity						
Pollutant	Permanent Crushing Operations	Portable Crushing Operations	Wash Plant Operations	Pug Mill Operations	Phoenix Operations	TOTAL
PM	176.08	47.36	4.68	4.53	3.56	236.21
* PM10	63.39	17.05	1.68	1.63	1.28	85.04
SO2	0.00	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.00	0.00	0.00	0.00
VOC	0.00	0.00	0.00	0.00	0.00	0.00
CO	0.00	0.00	0.00	0.00	0.00	0.00
total HAPs	0.00	0.00	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00	0.00	0.00

Total emissions based on rated capacity at 8,760 hours/year, after control.

\* PM-10 emissions are 36% of PM emissions.

**Appendix A: Emission Calculations**  
**Sand Processing - Permanent Crushing Operation**

**Company Name: Sellersburg Stone Company, Inc.**  
**Address City IN Zip: 1019 E. Utica St., Sellersburg, IN 47172**  
**F: 019-11033**  
**Plt ID: 019-00011**  
**Reviewer: Yvette de los Angeles/EVP**  
**Date: 10/13/99**

\* \* emissions before controls \* \*  
(TSP)

Storage		** see page 3 **			11.73 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 3-4 **			274.28 tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)
Loading & Unloading	1,936 ton/hr x	0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	13.57 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Crushing (primary)	1,600 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	35.32 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	1,400 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	30.91 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	1,400 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	30.91 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Finish Screens	5,580 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	769.87 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Scalper Screens	1,400 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	193.16 tons/yr	
Conveyor Transfer	1,936 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	24.93 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:					1384.67 tons/yr	

See AP-42 (1/95) Table 11.19.2-2, notes c and d before using these emission factors (PM10 emission factors differ from those listed above).

\* \* emissions after controls \* \*

Storage	11.73 tons/yr x	15% emitted after controls =	1.76 tons/yr
Transporting	274.28 tons/yr x	50% emitted after controls =	137.14 tons/yr
Loading & Unloading	13.57 tons/yr x	100% emitted after controls =	13.57 tons/yr
Crushing (primary)	35.32 tons/yr x	15% emitted after controls =	5.30 tons/yr
Crushing (secondary)	30.91 tons/yr x	15% emitted after controls =	4.64 tons/yr
Crushing (tertiary)	30.91 tons/yr x	1% emitted after controls =	0.31 tons/yr
Finish Screens	769.87 tons/yr x	1% emitted after controls =	7.70 tons/yr
Scalper Screens	193.16 tons/yr x	1% emitted after controls =	1.93 tons/yr
Conveying	24.93 tons/yr x	15% emitted after controls =	3.74 tons/yr
Total emissions after controls:			176.08 tons/yr

**\*\* fugitive vs. nonfugitive \*\***

Storage	11.73 tons/yr x	15% emitted after controls =	1.76 tons/yr
Transporting	274.28 tons/yr x	50% emitted after controls =	137.14 tons/yr
Loading / Unloading	13.57 tons/yr x	100% emitted after controls =	13.57 tons/yr
Total fugitive emissions:			152.47 tons/yr
Crushing (primary)	35.32 tons/yr x	15% emitted after controls =	5.30 tons/yr
Crushing (secondary)	30.91 tons/yr x	15% emitted after controls =	4.64 tons/yr
Crushing (tertiary)	30.91 tons/yr x	1% emitted after controls =	0.31 tons/yr
Finish Screens	769.87 tons/yr x	1% emitted after controls =	7.70 tons/yr
Scalper Screens	193.16 tons/yr x	1% emitted after controls =	1.93 tons/yr
Conveying:	24.93 tons/yr x	15% emitted after controls =	3.74 tons/yr
Total nonfugitive emissions:			23.61 tons/yr

**\*\* storage \*\***

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$\begin{aligned}
 E_f &= 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15) \\
 &= 1.85 \text{ lb/acre/day} \\
 \text{where } s &= 1.6 \% \text{ silt content of material} \\
 p &= 125 \text{ days of rain greater than or equal to 0.01 inch} \\
 f &= 15 \% \text{ of wind greater than or equal to 12 mph}
 \end{aligned}$$

$$\begin{aligned}
 E_p (\text{storage}) &= E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr}) \\
 &= 11.73 \text{ tons/yr} \\
 \text{where } sc &= 945,000 \text{ tons storage capacity}
 \end{aligned}$$

Note: This calculation is from AP-42, Fourth edition.

**\*\* transporting \*\***

The following calculations determine the amount of emissions created by unpaved and paved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

**HAUL TRUCKS TO CRUSHER**

3.14 trip/hr x 0.09 mile/trip x 2 (round trip) x 8760 hr/yr =		4,951.15 miles per year	
Unpaved Roads	Ef = k*5.9*(s/12)*(S/30)*[(W/3)^b]*[(w/4)^c]*[(365-p)/365] = 22.82 lb/mile where k = 0.8 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) s = 12 mean % silt content of unpaved roads S = 15 speed b = 0.7 Constant for PM-10 (b = 0.5 for PM-30 or TSP) c = 0.5 Constant for PM-10 (c = 0.4 for PM-30 or TSP) W = 85 tons average vehicle weight w = 8.0 number of wheels p = 125 number of days with at least 0.254mm of precipitation		
22.82 lb/mi x 4,951.15 mi/yr =		56.48 tons/yr	
2000 lb/ton			

3.14 trip/hr x 0.38 mile/trip x 2 (round trip) x 8760 hr/yr =		20,904.86 miles per year	
Paved Roads	Ef = k*[(W/3)^b]/[(sL/2)^c] = 6.05 lb/mile where k = 0.016 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) s = 12 mean % silt content of unpaved roads b = 1.5 Constant for PM-10 (b = 0.5 for PM-30 or TSP) c = 0.65 Constant for PM-10 (c = 0.4 for PM-30 or TSP) W = 85 tons average vehicle weight sL = 8.2 surface silt (g/m^2)		
6.05 lb/mi x 20,904.86 mi/yr =		63.20 tons/yr	
2000 lb/ton			

\*\* transporting \*\*

#### CUSTOMER TRUCKS

0.95 trip/hr x 0.095 mile/trip x 2 (round trip ) x 8760 hr/yr =		0.95 trip/hr x 0.284 mile/trip x 2 (round trip ) x 8760 hr/yr =	
1,581.18 miles per year		4,726.90 miles per year	
Unpaved Roads	$Ef = k \cdot 5.9 \cdot (s/12) \cdot (S/30) \cdot [(W/3)^b] \cdot [(w/4)^c] \cdot [(365-p)/365]$ = 8.78 lb/mile where k = 0.8 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) s = 12 mean % silt content of unpaved roads S = 15 speed b = 0.7 Constant for PM-10 (b = 0.5 for PM-30 or TSP) c = 0.5 Constant for PM-10 (c = 0.4 for PM-30 or TSP) W = 22 tons average vehicle weight w = 8.0 number of wheels p = 125 number of days with at least 0.254mm of precipitation	Paved Roads	$Ef = k \cdot [(W/3)^b] / [(sL/2)^c]$ = 0.78 lb/mile where k = 0.016 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) s = 12 mean % silt content of unpaved roads b = 1.5 Constant for PM-10 (b = 0.5 for PM-30 or TSP) c = 0.65 Constant for PM-10 (c = 0.4 for PM-30 or TSP) W = 22 tons average vehicle weight sL = 8.2 surface silt (g/m <sup>2</sup> )
8.78 lb/mi x 1,581.18 mi/yr = 6.94 tons/yr 2000 lb/ton		0.78 lb/mi x 4,726.90 mi/yr = 1.84 tons/yr 2000 lb/ton	

#### HAUL TRUCKS TO STOCKPILES

4.21 trip/hr x 0.189 mile/trip x 2 (round trip ) x 8760 hr/yr =		13,940.49 miles per year	
Unpaved Roads	$Ef = k \cdot 5.9 \cdot (s/12) \cdot (S/30) \cdot [(W/3)^b] \cdot [(w/4)^c] \cdot [(365-p)/365]$ = 20.92 lb/mile where k = 0.8 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) s = 12 mean % silt content of unpaved roads S = 15 speed b = 0.7 Constant for PM-10 (b = 0.5 for PM-30 or TSP) c = 0.5 Constant for PM-10 (c = 0.4 for PM-30 or TSP) W = 75 tons average vehicle weight w = 8.0 number of wheels p = 125 number of days with at least 0.254mm of precipitation		
20.92 lb/mi x 13,940.49 mi/yr = 145.81 tons/yr 2000 lb/ton			



**Appendix A: Emission Calculations**  
**Sand Processing - Portable Crushing Operation**

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**Company Name: Sellersburg Stone Company, Inc.**  
**Address City IN Zip: 1019 E. Utica St., Sellersburg, IN 47172**  
**F: 019-11033**  
**Pit ID: 019-00011**  
**Reviewer: Yvette de los Angeles/EVP**  
**Date: 10/13/99**

\* \* emissions before controls \* \*  
(TSP)

Storage		** see page 6 **			0.74 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 7 **			74.17 tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)
Loading & Unloading	600 ton/hr x	0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	4.20 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Crushing (primary)	400 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.83 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	400 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.83 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	400 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.83 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	600 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	82.78 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	600 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	7.73 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:					196.11 tons/yr	

See AP-42 (1/95) Table 11.19.2-2, notes c and d before using these emission factors (PM10 emission factors differ from those listed above).

\* \* emissions after controls \* \*

Storage	0.74 tons/yr x	15% emitted after controls =	0.11 tons/yr
Transporting	74.17 tons/yr x	50% emitted after controls =	37.08 tons/yr
Loading & Unloading	4.20 tons/yr x	100% emitted after controls =	4.20 tons/yr
Crushing (primary)	8.83 tons/yr x	15% emitted after controls =	1.32 tons/yr
Crushing (secondary)	8.83 tons/yr x	15% emitted after controls =	1.32 tons/yr
Crushing (tertiary)	8.83 tons/yr x	15% emitted after controls =	1.32 tons/yr
Screening	82.78 tons/yr x	1% emitted after controls =	0.83 tons/yr
Conveying	7.73 tons/yr x	15% emitted after controls =	1.16 tons/yr
Total emissions after controls:			47.36 tons/yr

**\*\* fugitive vs. nonfugitive \*\***

Storage	0.74 tons/yr x	15% emitted after controls =	0.11 tons/yr
Transporting	74.17 tons/yr x	50% emitted after controls =	37.08 tons/yr
Loading / Unloading	4.20 tons/yr x	100% emitted after controls =	4.20 tons/yr
Total fugitive emissions:			41.40 tons/yr
Crushing (primary)	8.83 tons/yr x	15% emitted after controls =	1.32 tons/yr
Crushing (secondary)	8.83 tons/yr x	15% emitted after controls =	1.32 tons/yr
Crushing (tertiary)	8.83 tons/yr x	15% emitted after controls =	1.32 tons/yr
Screening	82.78 tons/yr x	1% emitted after controls =	0.83 tons/yr
Conveying:	7.73 tons/yr x	15% emitted after controls =	1.16 tons/yr
Total nonfugitive emissions:			5.96 tons/yr

**\*\* storage \*\***

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$\begin{aligned}
 E_f &= 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15) \\
 &= 1.85 \text{ lb/acre/day} \\
 \text{where } s &= 1.6 \% \text{ silt content of material} \\
 p &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\
 f &= 15 \% \text{ of wind greater than or equal to 12 mph} \\
 E_p (\text{storage}) &= E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr}) \\
 &= 0.74 \text{ tons/yr} \\
 \text{where } sc &= 60,000 \text{ tons storage capacity}
 \end{aligned}$$

Note: This calculation is from AP-42, Fourth edition. The calculations were not included in subsequent editions of AP-42, therefore, it is up to the permit reviewers discretion to use this calculation.

\*\* transporting \*\*

The following calculations determine the amount of emissions created by unpaved and paved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

#### HAUL TRUCKS TO CRUSHER

2 trip/hr x 0.1 mile/trip x 2 (round trip ) x 8760 hr/yr =		3,504.00 miles per year	
Unpaved Roads	Ef = k*5.9*(s/12)*(S/30))*[(W/3)^b]*[(w/4)^c]*[(365-p)/365] = 19.10 lb/mile		
	where k = 0.8 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)		
	s = 12 mean % silt content of unpaved roads		
	S = 15 speed		
	b = 0.7 Constant for PM-10 (b = 0.5 for PM-30 or TSP)		
	c = 0.5 Constant for PM-10 (c = 0.4 for PM-30 or TSP)		
	W = 66 tons average vehicle weight		
	w = 8.0 number of wheels		
	p = 125 number of days with at least 0.254mm of precipitation		
	19.10 lb/mi x 3,504.00 mi/yr = 33.46 tons/yr		
	2000 lb/ton		

2 trip/hr x 0.1 mile/trip x 2 (round trip ) x 8760 hr/yr =		3,504.00 miles per year	
Paved Roads	Ef = k*[(W/3)^b]/[(sL/2)^c] = 4.13 lb/mile		
	where k = 0.016 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)		
	s = 12 mean % silt content of unpaved roads		
	b = 1.5 Constant for PM-10 (b = 0.5 for PM-30 or TSP)		
	c = 0.65 Constant for PM-10 (c = 0.4 for PM-30 or TSP)		
	W = 66 tons average vehicle weight		
	sL = 8.2 surface silt (g/m^2)		
	4.13 lb/mi x 3,504.00 mi/yr = 7.24 tons/yr		
	2000 lb/ton		

**Appendix A: Emission Calculations  
Sand Processing - Wash Plant**

**Company Name: Sellersburg Stone Company, Inc.**  
**Address City IN Zip: 1019 E. Utica St., Sellersburg, IN 47172**  
**F: 019-11033**  
**Plt ID: 019-00011**  
**Reviewer: Yvette de los Angeles/EVP**  
**Date: 10/13/99**

\* \* emissions before controls \* \*  
(TSP)

Storage		** see page 9 **			0.37 tons/yr
Transporting		** see page 10 **			1.23 tons/yr
Loading & Unloading	400 ton/hr x	0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.80 tons/yr
Crushing (primary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Crushing (secondary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Crushing (tertiary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Screening	800 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	110.38 tons/yr
Conveyor Transfer	800 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	10.30 tons/yr

AP-42 Ch.11.2.3 (Fourth edition, no update)

AP-42 Ch.13.2.2 (Supplement E, 9/98)

AP-42 Ch.13.2.4 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

Total emissions before controls: 125.08 tons/yr

See AP-42 (1/95) Table 11.19.2-2, notes c and d before using these emission factors (PM10 emission factors differ from those listed above).

\* \* emissions after controls \* \*

Storage	0.37 tons/yr x	15% emitted after controls =	0.06 tons/yr
Transporting	1.23 tons/yr x	50% emitted after controls =	0.61 tons/yr
Loading & Unloading	2.80 tons/yr x	100% emitted after controls =	2.80 tons/yr
Crushing (primary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Screening	110.38 tons/yr x	1% emitted after controls =	1.10 tons/yr
Conveying	10.30 tons/yr x	1% emitted after controls =	0.10 tons/yr

Total emissions after controls: 4.68 tons/yr

**\*\* fugitive vs. nonfugitive \*\***

Storage	0.37 tons/yr x	15% emitted after controls =	0.06 tons/yr
Transporting	1.23 tons/yr x	50% emitted after controls =	0.61 tons/yr
Loading / Unloading	2.80 tons/yr x	100% emitted after controls =	2.80 tons/yr
Total fugitive emissions:			3.47 tons/yr
Crushing (primary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Screening	110.38 tons/yr x	1% emitted after controls =	1.10 tons/yr
Conveying:	10.30 tons/yr x	1% emitted after controls =	0.10 tons/yr
Total nonfugitive emissions:			1.21 tons/yr

**\*\* storage \*\***

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$\begin{aligned}
 E_f &= 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15) \\
 &= 1.85 \text{ lb/acre/day} \\
 \text{where } s &= 1.6 \% \text{ silt content of material} \\
 p &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\
 f &= 15 \% \text{ of wind greater than or equal to 12 mph} \\
 E_p (\text{storage}) &= E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr}) \\
 &= 0.37 \text{ tons/yr} \\
 \text{where } sc &= 30,000 \text{ tons storage capacity}
 \end{aligned}$$

Note: This calculation is from AP-42, Fourth edition. The calculations were not included in subsequent editions of AP-42, therefore, it is up to the permit reviewers discretion to use this calculation.

\*\* transporting \*\*

The following calculations determine the amount of emissions created by paved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

$$\begin{aligned}
 & 1 \text{ trip/hr} \times \\
 & 0.189 \text{ mile/trip} \times \\
 & 2 \text{ (round trip)} \times \\
 & 8760 \text{ hr/yr} = 3,311.28 \text{ miles per year}
 \end{aligned}$$

Paved Roads

$$E_f = k \cdot [(W/3)^b] / [(sL/2)^c]$$

= 0.74 lb/mile

where k = 0.016 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)

s = 12 mean % silt content of unpaved roads

b = 1.5 Constant for PM-10 (b = 0.5 for PM-30 or TSP)

c = 0.65 Constant for PM-10 (c = 0.4 for PM-30 or TSP)

W = 21 tons average vehicle weight

sL = 8.2 surface silt (g/m<sup>2</sup>)

$$\frac{0.74 \text{ lb/mi} \times 3,311.28 \text{ mi/yr}}{2000 \text{ lb/ton}} = 1.23 \text{ tons/yr}$$

**Appendix A: Emission Calculations  
Sand Processing - Pug Mill**

**Company Name: Sellersburg Stone Company, Inc.**  
**Address City IN Zip: 1019 E. Utica St., Sellersburg, IN 47172**  
**F: 019-11033**  
**Plt ID: 019-00011**  
**Reviewer: Yvette de los Angeles/EVP**  
**Date: 10/13/99**

\* \* emissions before controls \* \*  
(TSP)

Storage		** see page 12 **			0.00 tons/yr
Transporting		** see page 13 **			5.98 tons/yr
Loading & Unloading	0 ton/hr x	0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Crushing (primary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Crushing (secondary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Crushing (tertiary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Screening	0 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr
Conveyor Transfer	800 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	10.30 tons/yr
Total emissions before controls:					16.28 tons/yr

AP-42 Ch.11.2.3 (Fourth edition, no update)  
AP-42 Ch.13.2.2 (Supplement E, 9/98)  
AP-42 Ch.13.2.4 (Fifth edition, 1/95)  
AP-42 Ch.11.19.2 (Fifth edition, 1/95)  
AP-42 Ch.11.19.2 (Fifth edition, 1/95)  
AP-42 Ch.11.19.2 (Fifth edition, 1/95)  
AP-42 Ch.11.19.2 (Fifth edition, 1/95)  
AP-42 Ch.11.19.2 (Fifth edition, 1/95)

See AP-42 (1/95) Table 11.19.2-2, notes c and d before using these emission factors (PM10 emission factors differ from those listed above).

\* \* emissions after controls \* \*

Storage	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Transporting	5.98 tons/yr x	50% emitted after controls =	2.99 tons/yr
Loading & Unloading	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (primary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Screening	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Conveying	10.30 tons/yr x	15% emitted after controls =	1.55 tons/yr
Total emissions after controls:			4.53 tons/yr

**\*\* fugitive vs. nonfugitive \*\***

Storage	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Transporting	5.98 tons/yr x	50% emitted after controls =	2.99 tons/yr
Loading / Unloading	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Total fugitive emissions:			2.99 tons/yr
Crushing (primary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Screening	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Conveying:	10.30 tons/yr x	15% emitted after controls =	1.55 tons/yr
Total nonfugitive emissions:			1.55 tons/yr

**\*\* storage \*\***

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$\begin{aligned}
 E_f &= 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15) \\
 &= 1.85 \text{ lb/acre/day} \\
 \text{where } s &= 1.6 \text{ \% silt content of material} \\
 p &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\
 f &= 15 \text{ \% of wind greater than or equal to 12 mph} \\
 E_p (\text{storage}) &= E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr}) \\
 &= 0.00 \text{ tons/yr} \\
 \text{where } sc &= 0.000 \text{ tons storage capacity}
 \end{aligned}$$

Note: This calculation is from AP-42, Fourth edition. The calculations were not included in subsequent editions of AP-42, therefore, it is up to the permit reviewers discretion to use this calculation.



\* \* transporting \* \*

The following calculations determine the amount of emissions created by paved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

$$\begin{aligned}
 & 4 \text{ trip/hr} \times \\
 & 0.23 \text{ mile/trip} \times \\
 & 2 \text{ (round trip) } \times \\
 & 8760 \text{ hr/yr} = 16,118.40 \text{ miles per year}
 \end{aligned}$$

Paved Road

$$\begin{aligned}
 E_f &= k \cdot [(W/3)^b] / [(M/2)^c] \\
 &= 0.74 \text{ lb/mile} \\
 \text{where } k &= 0.016 \text{ (particle size multiplier for PM-10)} \quad (k=10 \text{ for PM-30 or TSP}) \\
 s &= 12 \text{ mean \% silt content of unpaved roads} \\
 b &= 1.5 \text{ Constant for PM-10 (} b = 0.5 \text{ for PM-30 or TSP)} \\
 c &= 0.65 \text{ Constant for PM-10 (} c = 0.4 \text{ for PM-30 or TSP)} \\
 W &= 21 \text{ tons average vehicle weight} \\
 sL &= 8.2 \text{ surface silt (g/m}^2\text{)}
 \end{aligned}$$

$$\frac{0.74 \text{ lb/mi} \times 16,118.40 \text{ mi/yr}}{2000 \text{ lb/ton}} = 5.98 \text{ tons/yr}$$

**Appendix A: Emission Calculations  
Sand Processing - Phoenix**

**Company Name: Sellersburg Stone Company, Inc.**  
**Address City IN Zip: 1019 E. Utica St., Sellersburg, IN 47172**  
**F: 019-11033**  
**Plt ID: 019-00011**  
**Reviewer: Yvette de los Angeles/EVP**  
**Date: 10/13/99**

\* \* emissions before controls \* \*  
(TSP)

Storage		** see page 15 **			0.00 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 16 **			7.10 tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)
Loading & Unloading	0 ton/hr x	0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Crushing (primary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	0 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	70 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.90 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:					8.00 tons/yr	

See AP-42 (1/95) Table 11.19.2-2, notes c and d before using these emission factors (PM10 emission factors differ from those listed above).

\* \* emissions after controls \* \*

Storage	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Transporting	7.10 tons/yr x	50% emitted after controls =	3.55 tons/yr
Loading & Unloading	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (primary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Screening	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Conveying	0.90 tons/yr x	1% emitted after controls =	0.01 tons/yr
Total emissions after controls:			3.56 tons/yr

**\*\* fugitive vs. nonfugitive \*\***

Storage	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Transporting	7.10 tons/yr x	50% emitted after controls =	3.55 tons/yr
Loading / Unloading	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Total fugitive emissions:			3.55 tons/yr
Crushing (primary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Screening	0.00 tons/yr x	0% emitted after controls =	0.00 tons/yr
Conveying:	0.90 tons/yr x	1% emitted after controls =	0.01 tons/yr
Total nonfugitive emissions:			0.01 tons/yr

**\*\* storage \*\***

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$\begin{aligned}
 E_f &= 1.7(s/1.5)^{(365-p)/235}(f/15) \\
 &= 1.85 \text{ lb/acre/day} \\
 \text{where } s &= 1.6 \% \text{ silt content of material} \\
 p &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\
 f &= 15 \% \text{ of wind greater than or equal to 12 mph} \\
 E_p(\text{storage}) &= E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr}) \\
 &= 0.00 \text{ tons/yr} \\
 \text{where } sc &= 0,000 \text{ tons storage capacity}
 \end{aligned}$$

Note: This calculation is from AP-42, Fourth edition. The calculations were not included in subsequent editions of AP-42, therefore, it is up to the permit reviewers discretion to use this calculation.

\*\* transporting \*\*

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

0.26 trip/hr x 0.095 mile/trip x 2 (round trip ) x 8760 hr/yr =		0.26 trip/hr x 0.189 mile/trip x 2 (round trip ) x 8760 hr/yr =	
432.74 miles per year		860.93 miles per year	
Unpaved Roads $E_f = k \cdot 5.9 \cdot (s/12) \cdot (S/30) \cdot [(W/3)^b] \cdot [(w/4)^c] \cdot [(365-p)/365]$ = 21.85 lb/mile where k = 0.8 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) s = 12 mean % silt content of unpaved roads S = 15 speed b = 0.7 Constant for PM-10 (b = 0.5 for PM-30 or TSP) c = 0.5 Constant for PM-10 (c = 0.4 for PM-30 or TSP) W = 80 tons average vehicle weight w = 8.0 number of wheels p = 125 number of days with at least 0.254mm of precipitation		Paved Roads $E_f = k \cdot [(W/3)^b] / [(sL/2)^c]$ = 5.51 lb/mile where k = 0.016 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) s = 12 mean % silt content of unpaved roads b = 1.5 Constant for PM-10 (b = 0.5 for PM-30 or TSP) c = 0.65 Constant for PM-10 (c = 0.4 for PM-30 or TSP) W = 80 tons average vehicle weight sL = 8.2 surface silt (g/m <sup>2</sup> )	
21.85 lb/mi x      432.74 mi/yr =      4.73 tons/yr 2000 lb/ton		5.51 lb/mi x      860.93 mi/yr =      2.37 tons/yr 2000 lb/ton	